

Which HPLC column internal diameter should I use for LCMS – FAQ

With most LC-MS (as well as some other detection methods), smaller column diameter is generally necessary. LCMS systems are not equipped for the higher volumetric flow rates of 4.6mm ID columns. Efficient evaporation of the **eluent** solvent is achieved more readily on smaller diameter columns, which is required for MS detection. For this reason, we recommend a 2.1mm or smaller column internal diameter ID for these kinds of methods.

*NOTE: For most standard HPLC applications such as UV detection methods, a 4.6mm, 4.0 or 3.0mm I.D. is suitable. Smaller diameters will present unnecessary problems for standard UV instruments. For instance, the system tubing and especially the flow cell may cause **band broadening** with a 2.1mm column due to extra-column dispersion effects of the mismatch between the system and the column.*



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